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AUTHOR Gregait, Lucinda H.; Johnsen, Diane R.; Nielsen, Pamela S.
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ABSTRACT

This report describes a program for implementing self-assessment to enhance performance and clarify evaluation of participation in Physical Education (PE) classes. Participants were fifth and seventh graders in middle class midwestern communities. Teachers in targeted PE classes displayed concerns about students' abilities to self-assess when evaluating class participation. Researchers surveyed teachers and students at the beginning of the semester and found that both groups believed student participation should be part of students' grades. Most students believed they should share in evaluating their participation. Teachers rarely incorporated student self-assessment in their classrooms, and students rarely practiced self-assessment in class. Strategies researchers developed to help students become involved in self-assessment included: understanding what was expected of them through checklists/rubrics; learning cooperatively; setting goals; and keeping journals. An 18-week intervention used the four strategies. Pre- and post-intervention assessment of student surveys, review of anecdotal notes and student journals, and monitoring of checklists/rubrics indicated a rise in the percentage of students who felt participation should be part of their PE grade. Results suggested that cooperative strategies were essential, participation checklists/rubrics increased students' understanding of teacher expectations, journals promoted reflection, and goal setting made students more focused. Six appendixes present the teacher and student surveys, participation checklist/rubric, sample student journal, prediction card, and student survey results. (Contains 9 figures, 2 tables, and 21 references). (SM)

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IMPROVING EVALUATION OF STUDENT PARTICIPATION IN PHYSICAL EDUCATION THROUGH SELF-ASSESSMENT

by

Lucinda H. Gregait
Diane R. Johnsen
Pamela S. Nielsen

An Action Research Project Submitted to the Graduate Faculty of the

School of Education in Partial Fulfillment of the

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SIGNATURE PAGE

This project was approved by

Linda Burke, Ph.D. (FB)
Advisor

Pandy Courtis
Advisor

Beverly Gulley
Dean, School of Education

Dedication

To my husband, Bob and sons, Daniel, Matthew, Adam and James whose support and love remains unending, and to my mother, Patricia H. Harms, whose love and encouragement continues.

LHG

Thanks and appreciation to my husband, Rod and sons, Grant and Ryan for their love, patience, support, and encouragement.

DRJ

My love and thanks to my family, Chuck, Tim and Jana

PSN

Abstract

Authors: Lucinda Gregait
Diane Johnsen
Pamela Nielsen

Date: May 5, 1997 Site: Streamwood, Il.

Title: Improving Evaluation of Student Participation
In Physical Education Through Self-Assessment

This report describes a program for implementing self-assessment in order to enhance performance and clarify evaluation of participation in Physical Education class. The targeted populations consist of fifth and seventh grade students in middle class communities located in the Midwest near a major metropolitan area. Weaknesses were found in the methods used to evaluate participation as documented in student and teacher surveys.

Analysis of probable cause data reveals that students report a lack of experience related to self-assessment, developing a plan of action and evaluating their progress. Results from teacher and student surveys demonstrate minimal exposure to, and/or involvement in the evaluation of participation in Physical Education. Literature reviewed indicates a need to incorporate self-assessment with the learning process.

After reviewing solution strategies suggested in literature, four interventions were selected to be conducted in Physical Education: cooperative group strategies to facilitate self-assessment; goal setting, implementing prediction skills, student journals, and participation checklist/rubric.

Researchers indicate that the participation checklist/rubric clarified the criteria used in the evaluation of participation in physical education class. The journaling incorporated in the intervention was successful in expanding the researchers' sources of insight and enhanced their communication with students. Prediction skills contributed to realistic goal setting and proved to be a valuable tool for the students.

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Chapter 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The teachers of the targeted fifth and seventh grade physical education classes displayed concerns about the ability of students to self assess as related to evaluation of student participation. Evidence of the concern is found in participation grades along with teacher and student surveys.

Immediate Problem Context

School A

The targeted school is a public junior high school consisting of 641 seventh and eighth grade students. The junior high school draws its students from four neighboring elementary schools and feeds into three local high schools. The student population includes 69.6% White, 5.9% Black, 9.5% Hispanic, 14.7% Asian/Pacific Islander, and 0.3% Native American, with an attendance rate of 96.0%. There is no chronic truancy. The student mobility rate is 7.1%. Students from low income families comprise 1.9% of the junior high school while 5.3% have Limited-English-Proficiency. Students with limited-English are eligible for bilingual education. The bilingual program in the junior

high school is predominately students of Hispanic descent who live within the school's enrollment boundaries (School Report Card A, 1996).

The standard curriculum includes core subjects: mathematics, English, social studies and science. Core subjects are required daily along with physical education. The school day consists of nine 50-minute periods. English classes are allotted two consecutive periods. Electives for seventh grade students include French, Spanish, chorus, art, music, and band. Two additional electives which eighth grade students may choose are life skills and technology education. Study hall is an elective but it is strongly discouraged. All students have half a period of study hall and half a period of lunch each day. Physical education is the only subject in which full inclusion of all students occurs. Physical education is co-ed in the junior high school. During one quarter, students are enrolled in a heath class in place of their physical education class.

The physical education curriculum focuses on team sports and sportsmanship in activities such as football, basketball and volleyball. Individual and lifelong skills are developed in activities such as social dance, weight training and aerobics.

Currently, the personnel at the junior high school includes a principal, an assistant principal, 45 certified faculty members and 21 non-certified support staff members. The racial/ethnic backgrounds of the classroom teachers are: 97.3% White, 0.7% Black, 1.0% Hispanic, 0.9% Asian/Pacific Islander, and 0.1% Native American, including 14.3% male and 85.7% female. The average teaching experience in the district is 16.7 years. The district records indicate 56.4% of the

faculty have Master's degree or beyond (School Report Card A, 1996).

The junior high school was built in 1975 and remained open until 1985 when it closed due to declining enrollment. Between 1985 and 1994 the school was leased and used for a variety of purposes. Its original exterior, a single-story brick building has not changed. Although no additional space was added to the original structure, the building was extensively updated prior to its reopening in 1994. Behind the building, the park district shares its fields, which include two softball diamonds, two tennis courts and a football field. The interior facility includes a double gymnasium and a multi-purpose room.

The Surrounding Community

School A

The community lies in the mid-west within 30 miles of a major metropolitan area. The junior high school's boundaries include areas from two towns. The towns' populations are approximately 73,745 and 49,100 people. Median family incomes are $54,591 and $49,475 respectively. The towns have a total of approximately 4,900 businesses and include three parochial grammar schools (Northwest Association, 1996).

The targeted school is one of five public junior high schools in the local elementary school district. The school district includes 23 elementary schools for a total student population of over 16,000 students. Along with an administration center and warehouse, district buildings include a program service center and a nature center.

In 1990, the school district asked the community to pass a referendum which would have provided funds for the building of additional space at many of its sites. The referendum did not pass. In 1991, the school district asked the community to pass a referendum which requested a 30 cent increase in the Education Fund. The referendum did not pass.

The school district wanted to reopen the targeted school as a middle school in 1993 but there were two problems. The first problem was funding the increase in staff. The second problem was the existing junior high schools also embraced the middle school concepts and questioned the "fairness" of reopening the targeted school as a middle school while they remained junior high schools.

When the school reopened in 1994 using the label of middle school, its student population was comprised of 320 seventh grade students. In 1995 the school was instructed by the board of education and its newly hired superintendent to refer to the school as a junior high. Currently, the targeted school is a junior high school with a population of 700 seventh and eighth grade students.

Immediate Problem Context

School B

The targeted elementary school has a total enrollment of 722 students with 42 certified faculty members and 13 non-certified support staff members. This school is one of three elementary schools in the district with a fourth currently under construction. The school population consist of: 97.6 % White, 1.5 % Hispanic, 0.8% Asian/Pacific Islander and no Blacks or Native Americans. This school has only 1.0% low income population and 0.6% Limited-English-Proficient students. The average

physical education class size is 25. The school has an attendance rate of 96.1% with 7.7% mobility rate. This targeted school experiences no chronic truancy (School Report Card B, 1996).

The building was originally built as a high school in 1922. It was converted into a middle school and was renovated in 1994 to house the current elementary school. The building is a three-story brick structure situated on a city block. The building has two gymnasiums. The large gym is 60' x 100' and the small gym is 60' x 40'. The playground area consists of two soccer fields, three small basketball courts, and two black-topped surfaces. A variety of playground equipment borders the soccer fields.

School C

The targeted school is in the same unit district as school B with a total enrollment of 562 students, 33 certified faculty members, and 12 non certified support staff of members. The school population consists of 97.0% White, 0.5% Black,1.1% Hispanic, 1.2% Asian/Pacific Islander and no Native Americans. This school has no students that qualify as low income or Limited-English-Proficient. The average physical education class size is 26. The school has an attendance rate of 96.4% with an 9.1% mobility rate. This school experiences no chronic truancy (School Report Card C, 1996).

The school was originally built in 1964 as a single-story brick structure. Two additions have since been added. The first incorporated four classrooms and a double size gymnasium. The second included four more classrooms. The gym was a

partnership venture with the park district. Currently, the school has access to the gym during the day and for a limited number of week-night school functions. The park district utilizes the remainder of the time: after school, week-ends and all summer. The building sits on 14 acres which includes a baseball diamond, a grassy area for soccer, or flag football, and a playground area that is much too small for the school population. The black top area has two four-square games, one basketball hoop, minimal swings, and a variety of playground equipment.

The Surrounding Community

Schools B and C

The school district lies in a midwestern rural/suburban community within 40 miles of a major metropolitan area. According to an August 1994, general demographic report, the current population consists of 16,594 people. The majority of the households belong to white-collar workers 35 - 49 years old with an average income of $53,380. The ethnic makeup of the community is 98.4% White, 0.1% Black, 0.1% Eskimo, 1.2% Asian/Pacific Islander, 0.3% other races with no Native Americans (Chamber of Commerce, 1994).

This unit district is comprised of one high school, one middle school and four elementary schools. The total district enrollment is 3,711 students. The expenditure per year per student is $5,581. There are 192 teachers creating a 21.7:1 student to teacher ratio. The average teachers' experience is 12.5 years, 50.2% have Bachelor's degrees, and 49.8% of the teachers have a Master's degree or beyond.

The average teacher salary is $43,217, while the administrators salary is $71,369 (School Report Card, 1996).

The elementary physical education program included in schools B and C meet twice per week for 30 minutes each. The program includes 15 units that last at least three weeks. The units encompass individual activities such as dance, roller skating, and personal fitness. Examples of team activities include volleyball, football and soccer. The curriculum includes a variety of lessons in which skills are taught that encourage participation in lifelong activities. These activities are all co-educational, incorporating social and cooperative skills, emphasizing personal accountability, and encouraging execution of skills.

Regional and National Context of Problem

Participation in physical activity among America's youth has been a rising concern since the inception of the President's Council on Physical Fitness and Sports in 1956. Physical education teachers continue to assess the fitness levels using the President's National Fitness standards. To qualify for the National Fitness award students need to rank in the top 50th percentile in five tests. The criteria for the tests are given in Table 1 and 2.

Table 1

National Fitness Award Qualifying Standards for Boys

AGE	CURL-UPS (Timed one minute)	SHUTTLE RUN (seconds)	SIT AND REACH (centimeters)	ONE MILE RUN (minutes/seconds)	PULL-UPS
10	35	11.5	25	9:48	2
11	37	11.1	25	9:20	2
12	40	10.6	26	8:40	2
13	42	10.2	26	8:06	3
14	45	9.9	28	7:44	5

Table 2

National Fitness Award Qualifying Standards for Girls

AGE	CURL-UPS (Timed one minute)	SHUTTLE RUN (seconds)	SIT AND REACH (centimeters)	ONE-MILE RUN (minutes/seconds)	PULL-UPS
10	30	12.1	28	11:22	1
11	32	11.5	29	11:17	1
12	35	11.3	30	11:05	1
13	37	11.1	31	10:23	1
14	37	11.2	33	10:06	1

"Numerous studies show that children who exercise regularly do better in school" (Hancock, 1996, p.58). Over 63% of American children dc not participate in a daily physical education class (Rathbun, 1995). Researchers' observations conclude that there are some students whose participation level is decreased due to self perception of a deficient fitness level.

The process of self-assessment includes thinking about feelings and accomplishments as a powerful way for children to learn about what they know and what they need to learn (Glazer, 1995). There are students who share a lack of ability to accurately self-assess situations, develop a plan of action and evaluate progress. Students tend to rely on their physical education teachers to make evaluations rather than claiming responsibility for self-assessment. Problems arise when students wait for a report card or test scores to inform them of their progress in physical education, instead of self-assessing throughout the learning process.

Chapter 2

PROBLEM EVIDENCE AND PROBABLE CAUSE

Problem Evidence

As explained in Chapter 1, the process of self-assessment includes thinking about feelings and accomplishments. The researchers have observed students who generally lack the ability to self-assess and evaluate their progress in physical education. Students were limited in assessment strategies as a result of scarce experience and opportunity.

The problem evidence was gathered during the first week of the semester through teacher surveys completed by physical educators in the targeted school districts (Appendix A). The targeted seventh and fifth students' surveys were completed at the same time (Appendix B). Physical educators at Site A agreed they had infrequent or no problems with student participation in their classrooms. Whereas, physical educators at Sites B and C agreed they had some problems with student participation in their classrooms. Participation is an area of concern because 100% of the teachers

surveyed evaluate participation in their classrooms. The students concurred that participation should be part of their physical education grade as shown in Figure 1.

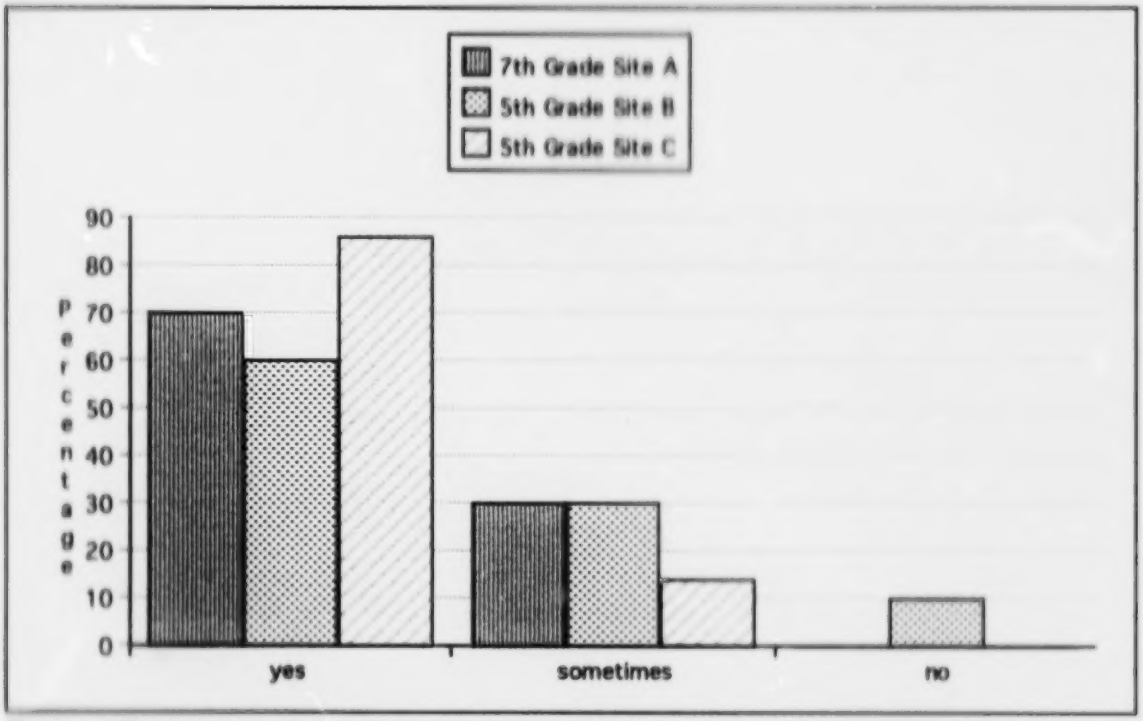

Figure 1 Percentage of students who think participation should be a part of their physical education grade.

Furthermore, most students felt the responsibility of evaluating their participation should be shared between the teacher and themselves. Some students chose to leave the evaluation of their participation solely to their teacher as shown in Figure 2. Criteria used to evaluate participation were primarily subjective;listening, following directions, cooperation with classmates, and effort. When students were surveyed, 25% disagreed with their effort grade, indicating a discrepancy

between the teacher's perception of the student's effort and the student's perception. An objective that contributes to determining the participation grade is the evaluation of dressing for activities in class. The teachers consistently used this criteria as one aspect of their grading, whereas students did not include it in their list of criteria for grading participation.

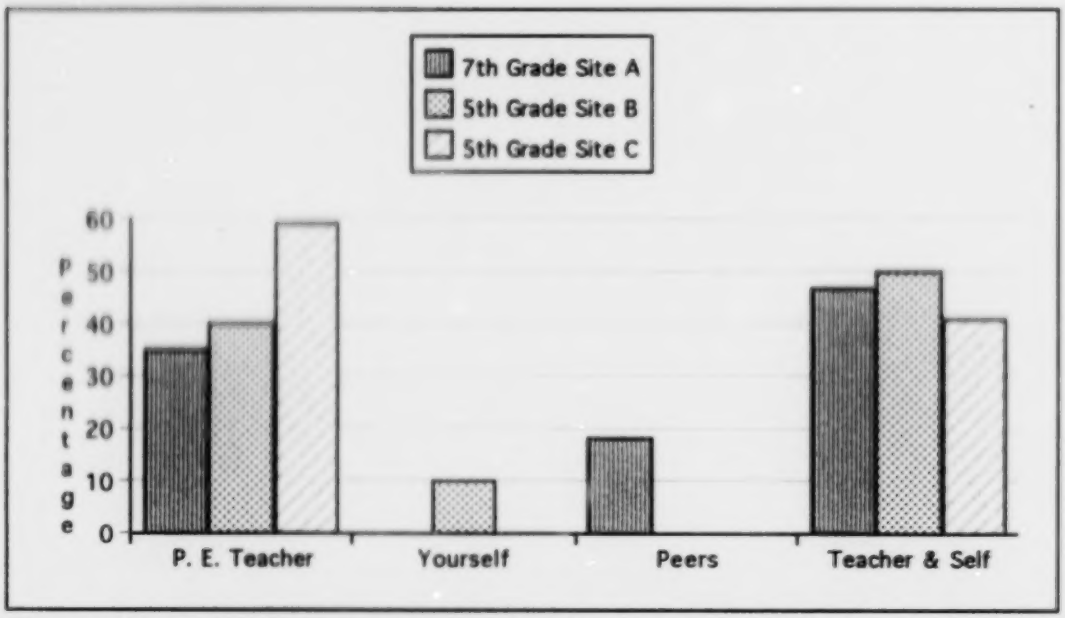

Figure 2 Student response regarding who should grade participation in physical education class.

Probable Causes

Site-Based

After conducting teacher surveys throughout targeted school districts, there was evidence to support our concerns. According to the surveys a clear majority of teachers in the targeted districts rarely incorporate student self-assessment in their classrooms. Correspondingly, students rarely practice self-assessment in class (Figure 3). Self-assessment is so seldom used that its impact is very limited in determining the students' final grade.

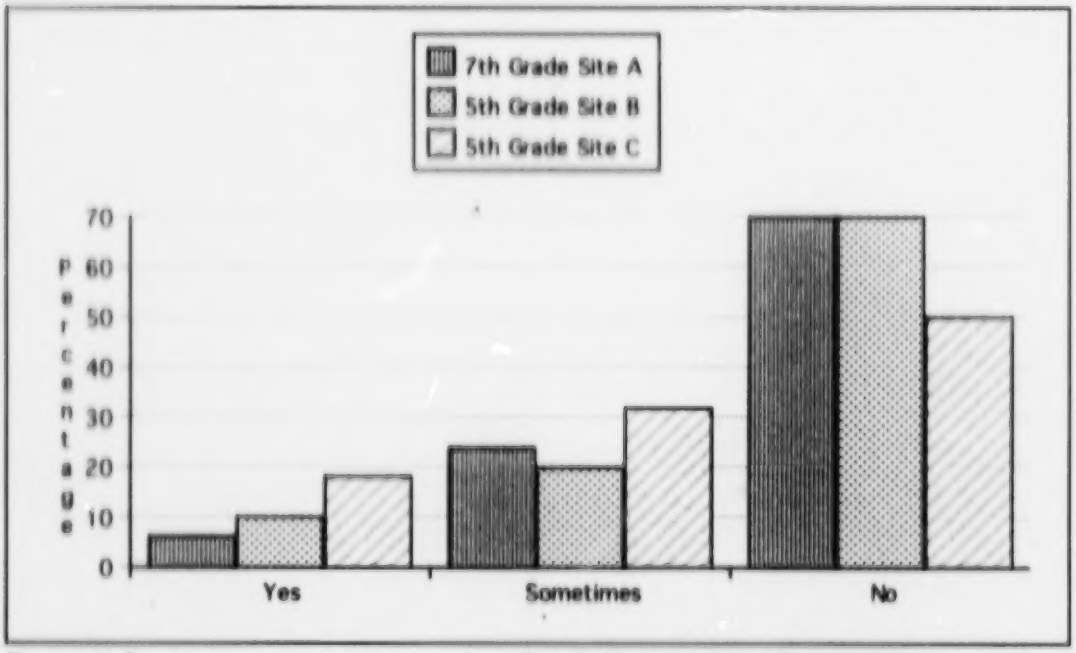

Figure 3 Student response when asked if they have ever self-assessed in physical education class.

Literature-Based

First, "Educational experiments from as early as the 1950's have shown that children who engage in regular physical activity out perform their couch-potato counterparts academically, as well as in areas of health, fitness, discipline and enthusiasm" (Rathbun, 1995, p. 10). Neuroscientist Greenough's research indicates the benefits of physical activity in children is crucial for long-term maintenance of healthy brains. "Numerous studies show that children who exercise regularly do better in school" (Hancock, 1996, p.58). Hatfield states (as cited in Rathbun, 1995, p. 10), "It's important for kids to develop good exercise habits they can carry into adulthood. Physical activity in older people boosts intellectual skills by slowing brain deterioration caused by age."

Despite a society where fitness products flood consumer markets, physical activity among Americans is on the decline at an alarming rate. According to a new report on Physical Activity and Health, the Surgeon General states that 60 % of American adults are real "couch-potates" and at least half of these are less active than the couch itself (Chronicle, 1996). Even worst is the decline in physical activity among youths age 12 to 21, especially high school students. Physical activity was defined as 15 to 20 minutes of jogging, basketball, or 30 minutes of brisk walking per day; not a brutal, exhaustive marathon.

One clear reason for the decline in physical activity, as described in the Surgeon General's report, is that high school physical education classes over the last five years have dropped in enrollment from 42 % to 25%. This report suggests that

people in general do not value physical education classes as an important part of a student's curriculum. However, students who stay active discover that the long term health benefits are tremendous (Chronicle, 1996).

Daily physical education is rare among elementary schools in our nation. The targeted fifth grade classes receive two, 30-minute physical education classes per week, whereas the targeted seventh grade class receives 45 minutes per day.

Second, students are unsure about sharing what they know. The teacher has had the responsibility of communicating the student's achievement level by a grade on a report card. The judgment has been left to the teacher to assess the student's learning in physical education. Students claim no ownership in their own learning. Rimm stated (1986) that underachievers believe that achievement is related to luck or to generous teachers. Often students have unrealistically high goals. They think that their luck will suddenly change and they will become the star athlete of their dreams. Students do not believe their efforts will make a difference, and they are quick to point out the lucky times that they received good grades effortlessly.

Third, teachers need to involve students more fully in their own fitness assessment. Hensley's study (as cited in Slettum, 1995) indicates participation/effort, and attitudes were 61% of the student's physical education grade. The researchers feel that students need a clear understanding of the components used to evaluate participation/effort in physical education. There is often a gap between student and teacher perception of appropriate participation. Teachers need to find ways that demonstrate clearly to the student their level of accomplishments. The

more aware students are of their learning the more ownership they will have (Ogle, 1994).

Finally, many students feel anxious when faced with a difficult problem. They anticipate failure soon after being confronted with the difficulty. The anxiety is usually found when there is a lack of ability and the student predicts failure. Participation is effected when such a perception is felt (Jansen, 1996).

Physical education classrooms need to address the problem of clarifying participation, and lack of student involvement in the assessment process. The absence of daily physical activity is a multi-faceted problem which is difficult to resolve. The research intervention strategies focus on improving the evaluation process as it relates to participation in physical education.

Chapter 3

THE SOLUTION STRATEGY

Review of Literature

After reviewing professional literature concerning students ability to self-assess as related to evaluation of student participation, the following strategies could be used during physical education class. They are student self-assessment, cooperative learning, student journals, and goal setting. The following literature review will examine these strategies.

The action researchers feel self-assessment can be an effective tool in reinforcing knowledge gained in physical education. The process of self-assessment includes thinking about what they know and what they need to learn (Glazer, 1995). Self-assessment could cause students to be more purposeful in their learning, as well as personal goal setting and thinking about what they have learned (Glazer, 1995).

A good physical education program should provide experiences and information for all students to develop a positive, psychological attitude toward physical activity and a healthy lifestyle. The program should be dedicated to the

development of the total child; both mind and body. A good physical education program would include the "why" and "how" of each activity so students understand the purpose of the activity. A goal for a Physical Educator is for each student to develop a list of personal priorities, which could include lifelong activity. Exercise can become intrinsically motivating. Extrinsic pressure is only temporarily effective and may destroy intrinsic interest. Fox's (1991) analysis indicates that grades, winning awards, and punishment, lose impact on the adolescent student.

Self-Assessment

Before students can assess their own progress, they have to understand what is expected of them (Radford, et al., 1995). Setting standards will help students to perform better when they know the goal, see models, and understand what needs to be accomplished to reach the desired outcome. Assessment needs to occur throughout the learning process. Motivation, effort, and self-esteem affect learning and participation. By accepting responsibility for participation evaluation, the student will gain a positive self-image through his or her accomplishments as well as be more likely to achieve agreed upon goals (Carpenter & Tunnell, 1994).

Cooperative Learning

Cooperative learning provides shared responsibilities which help students meet goals. Reasonable risks are taken by students when cooperative learning is included in physical education classes, because the proficient student can help another student acquire new skills.

Teamwork is often discussed in physical education. Teamwork is a form of cooperative learning. In cooperative learning the element of fun is maximized because the fear of failure or rejection is minimized (Jansen, 1996). Team members must feel obligated and committed to each other to ensure they will give their best effort at all times, which is exactly what cooperative learning promotes. A cooperative group could give consistent support to the student. Emotional ties could keep them together during hard times as skill develops (Warren & Chapman, 1992).

Students who claim ownership of their learning in physical education need to determine their own goals, discuss participation criteria, and set standards. Students monitor their strengths and weaknesses through self and peer evaluation. Self-assessment requires setting realistic goals and determining if they are attainable. This tool is very valuable when used to help a student learn (Radford,et al 1995).

Teachers often complain of the time constraints involved in adding more to their curriculums. Adding paperwork to the students physical education class would be a problem if it jeopardized the students physical fitness development due to loss of time. However, the cooperative groups should help facilitate the paperwork. Making the students diagnose his or her own learning compels them to be responsible for his or her level of fitness as they modify their level of participation.

Gordon (1974) stated a principle of participation: People are more likely to accept a decision and more motivated to carry it out when they have participated in making the decision, as opposed to one in which they have been denied a voice.

Goal Setting

The researchers feel that students need opportunities to set goals and become responsible for the level of participation in physical education. One way to learn how to self-assess and set realistic goals is through prediction strategies (Glazer, 1994). Students, who can accurately predict what will happen during a game or predict how well they can accomplish a drill activity, are using this form of assessment. Setting realistic goals develops as the student discovers if the predictions are correct. By predicting outcomes, students should become better at setting goals. By setting goals, students practice making choices. Students need to recognize that they are choosing their level of effort and participation in physical education.

Assessment needs to occur throughout the learning process, using such strategies as feedback from the teacher, from peers, and from student self evaluation. Positive feedback, recognizing the desired behavior, should encourage the student to practice and improve.

Journals

Students need time to be reflective (Zemelman & Hyde, 1993). Reflection is an ongoing process which requires knowing where you are, where you have been, and where you are going. Allowing physical education students time to reflect in journals should promote more awareness of personal participation and goal setting. Through reflection, students should determine if the goal is realistic or needs modification. Research indicates that portfolio assessment encourages students to focus more on their own learning and less on how they compare with others or how the teacher

judges their work (Steinberg, 1993).

The process of maturing involves taking control of one's life. Charged with the responsibility of assessing their own participation in physical education, students take control of their own work. The result is a setting which makes the student feel comfortable and capable, rather than threatened by physical activity (Fox, 1991).

Project Objective and Processes

As a result of student self-assessment, during the period of September 1996, to January 1997, the target groups will improve the ability to self-assess participation in physical education, as measured by journals, participation checklist/rubric and surveys.

In order to accomplish the project objectives, the following strategic procedures are proposed:

1. Students will be taught cooperative group strategies that will be used to facilitate self-assessment process in physical education.

2. Students will be taught how to use journals to aid in self-assessment in physical education.

3. Students will be taught appropriate goal setting through lessons which implement prediction skills in physical education.

4. Teacher will provide participation checklist/rubric which will aid self-evaluation of participation in physical education.

Action Plan for the Intervention

I. Targeted Students

5th grade	7th grade
Co-educational	Co-educational
2 days per week	5 days per week
30 minute period	45 minute period
18 weeks	18 weeks

II Components of Intervention

A. Cooperative Learning Strategies

1. Student behavior

-self-assessment through participation rubric

-complete survey in September and January

2. Timing

-18 week period

-cooperative learning strategies will be incorporated into two or three lessons per unit using participation checklist/ rubric for three minutes

3. Contents / Activities

Teachers will use the following strategies

-student survey in September and January which will take five minutes to administer (Appendix B)

-explain the categories listed in the participation checklist / rubric during the first lesson of each unit for two minutes (Appendix C)

-verbally reinforce appropriate behavior frequently

-establish cooperative groups using varied methods

B. Student Journals

1. Student behavior

-complete a journal entry

2. Timing

-once a week during the unit

-each journal entry will take approximately three minutes

3. Content / Activities

Teachers will complete a journal statement daily on targeted group from September to January for ten minutes per session

C. Goal Setting

1. Student behavior

-practice goal setting through applying prediction strategies

2. Timing

-incorporate predicting skills into three units from September to January

-two or three sessions per unit

3. Content / Activities

-model goal setting through predictions of own skill during various units

-explain realistic goal setting strategies using examples during various units

Methods of Assessment

In order to assess the effects of the intervention, pre- and post- intervention assessment will be used to analyze data from the student survey. Anecdotal notes along with ongoing review of student journals will be used to document the student's progression in the skill of self-assessing and realistic goal setting. Unit participation checklist/rubric will be monitored throughout the intervention.

Chapter 4

PROJECT RESULTS

Historical Description of Intervention

The terminal objective of the intervention addressed students' ability to self-assess as related to evaluation of student participation in targeted seventh and fifth grade physical education classes. As result of student self-assessment, during the period of September 1996 to January 1997, the target groups will improve the ability to self-assess participation in physical education, as measured in journals, participation checklist/rubric and surveys. Research, teacher observation and surveys (Appendices A & B) indicated that the targeted students were unable to assess their progress because of lack of exposure.

Assessment data gathered by conducting teacher surveys throughout targeted school districts in September of 1996 supported the researchers' concerns. The data showed a clear majority of teachers in the targeted districts rarely incorporated student self-assessment. Correspondingly, student surveys taken at the same time determined that students were inexperienced at self-assessment in physical education class. The researchers developed an action plan designed to

empower their students with the ability to self-assess.

In Site A the targeted seventh grade students met five days a week for 40 minutes a day rather than 45 minutes as stated in the action plan. The interventions covered 19 weeks rather than the 18 weeks as stated in the plan. Students journaled once a week throughout the intervention. Journals were completed at the beginning of the class period.

Participation checklist/rubric (Appendix C) were used by the students during the course of each of seven units. Students were instructed to self-assess specific categories on the checklist/rubric.

Class lessons included practice in predicting and appropriate goal setting whenever skill tests were administered for the unit. The teacher at Site A modeled appropriate setting and predicting when demonstrating the skill tests for the unit.

The targeted fifth grade students in schools at Sites B & C met for two, 30 minute class periods per week. The intervention described in the action plan was followed for 18 weeks.

Students journaled (Appendix D) once a week for six units, reflecting on the day's activities. This was done at the end of the class period. These journals as shown in Figure 4, encouraged students to review the activities and concepts focused on during class and express their thoughts on their participation and progress during physical education class. Included in the journals were opportunities to practice goal setting through applying prediction skills and strategies.

STUDENT JOURNAL

Name _____ Class _____

I would place my skills in Roller Skating at this level at the beginning of our unit.
Place an "X" at your skill level.

Beginner | Intermediate | Advanced

1. My goal is to be able to be better at tricks
   by the end of the skating unit.
2. This unit is different because you have to roll and
   not ride on bikes
3. I am amazed that I that I didn't fall down and
   hurting [illegible].
4. I never thought I would be able to Do a trick!! =
   that I did quat!!!!

I would place my skills in Roller Skating at this level at the end of our unit.
Place an "X" at your level.

Beginner | Intermediate | Advanced

Figure 4

Completed Student Journal

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Realistic goal setting strategies were incorporated during class activities. Figure 5 shows an example of a task sheet used with students to predict success of their performance.

Thinking Prediction Card

Name_____ **Class** _____ **Date**_____

Can you...	Yes	No	Goal
1. Keep the rhythm pattern with the poles for 32 counts (4 patterns)?	X		
2. Keep the rhythm pattern with your feet for 32 counts (4 patterns)?	X		
3. Enjoy the movement and try new rhythm patterns?	X		
4. Help a group member learn the pattern?	X		
5. Tell where this dance originated from?			X

Figure 5

Completed Prediction Card

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Students completed the participation checklist/rubric (Appendix C) once a week on the next day of physical education class during each week. Figure 6 exhibits a student's self-assessment of participation.

PARTICIPATION CHECKLIST

NAME _____ DATE _____

Unit Tinkling CLASS _____

CIRCLE ONE ANSWER:

RATING SCALE 0 — 1 — 2
No Missing Part Yes

1. **Prepared to participate**.....0 1 (2)
   * dressed for Physical Education (comfortable clothes & shoes)

RATING SCALE 0 — 1 — 2 — 3
NEVER SOMETIMES OFTEN ALWAYS

2. **Active listening**.....0 1 (2) 3
   * sitting up
   * eyes on speaker
   * no talking
   * keep hands to yourself (don't distract others)
   * be able to repeat information

3. **Cooperate with teacher**.....0 1 2 (3)
   * follow directions
   * be respectful

4. **Cooperate with group**.....0 1 (2) 3
   * stay on task
   * defer judgment (accept all ideas -no put downs)
   * contribute

5. **Sportsmanship/Teamwork**.....0 1 (2) 3
   * stay positive with self and group
   * acknowledge effort

6. **Enjoyment and Enthusiasm**.....0 1 (2) 3
   * smile
   * be encouraging

7. **Care and Proper use of equipment**.....0 1 2 (3)
   * wait for instruction before touching equipment
   * safety first
   * use equipment properly

Figure 6

Completed Participation Checklist/Rubric

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At Site A the targeted students self-assessed in specific categories on the checklist/rubric. At times individuals were instructed to self-assess when the teacher found their performance unacceptable. Sites B & C consistently used the entire checklist/rubric once a week. Researchers reinforced the categories listed in the participation checklist/rubric when it became obvious that the students required additional guidance. Researchers at Sites B & C deviated from the action plan by neglecting to model goal setting through predictions of their own skills. All researchers completed weekly journal entries on targeted groups rather than daily journals as the action plan stated.

Presentation of Analysis of Results

The effects of the planned interventions were assessed by reviewing results of the post surveys. The post surveys at Sites A & C indicated a rise in the percentage of students who felt participation should be a part of their physical education grade. The post surveys at Site C indicated a slight decline in this category. Students in Sites A & B expressed a decline in their opinion that participation should sometimes be a part of their physical education grade. Whereas, students in Site C showed a slight increase in this category. In Site B, ten percent of the targeted students felt participation should not be a part of their physical education grade as shown in Figure 7.

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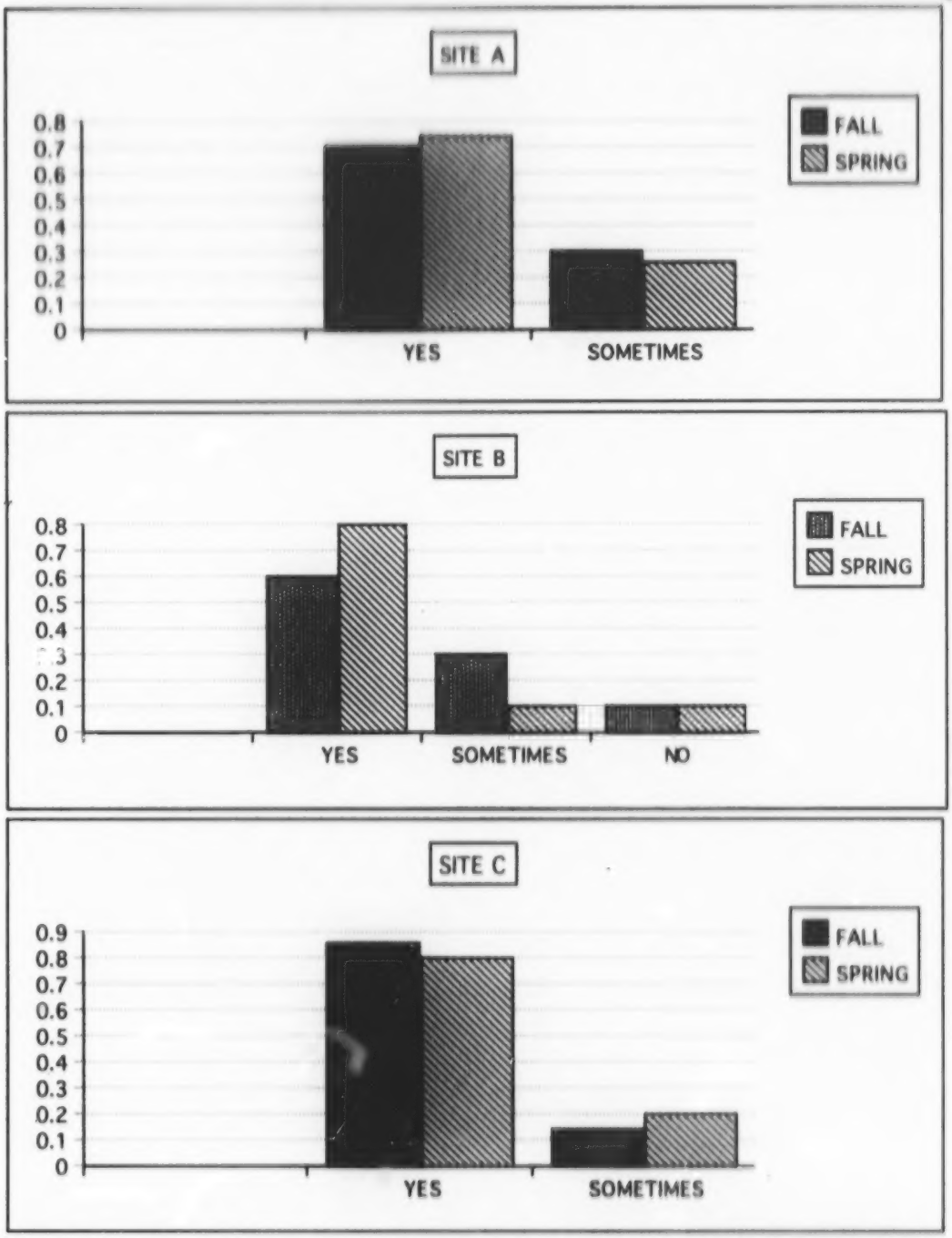

Figure 7 Percentage of students who think participation should be a part of their physical education grade.

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Reviewing the results in Figure 8 shows Sites A & C exhibit a decrease in the students who felt that the physical education teacher should determine participation grade. Site A had a 30 percent decrease and Site C had a 35 percent decrease. However, Site B targeted students indicated a ten percent increase in their desire to have the physical education teacher remain in control of the participation grade. Prior to the intervention in the fall, no targeted students at Sites A & C wanted to be involved in the grading process. Following the intervention Site A showed five percent of the targeted students and in Site C ten percent of those targeted wanted to assess themselves on their participation. Meanwhile Site B had consistent results on self-assessing their participation grade on both surveys. In the area concerning peers evaluating participation, Site A decreased by ten percent, Site B increased by ten percent and Site C had no response to peer evaluation. Site A exhibited a 33 percent increase and Site C demonstrated a 25 percent increase showing a desire to be involved in determining their participation grade. The targeted students at Site B showed a 20 percent decrease in the same category.

Combining results concerning student involvement in determining their participation grade it is apparent that students want some involvement in determining their participation grade and not be left solely in the hands of the physical education teacher, their peers or themselves.

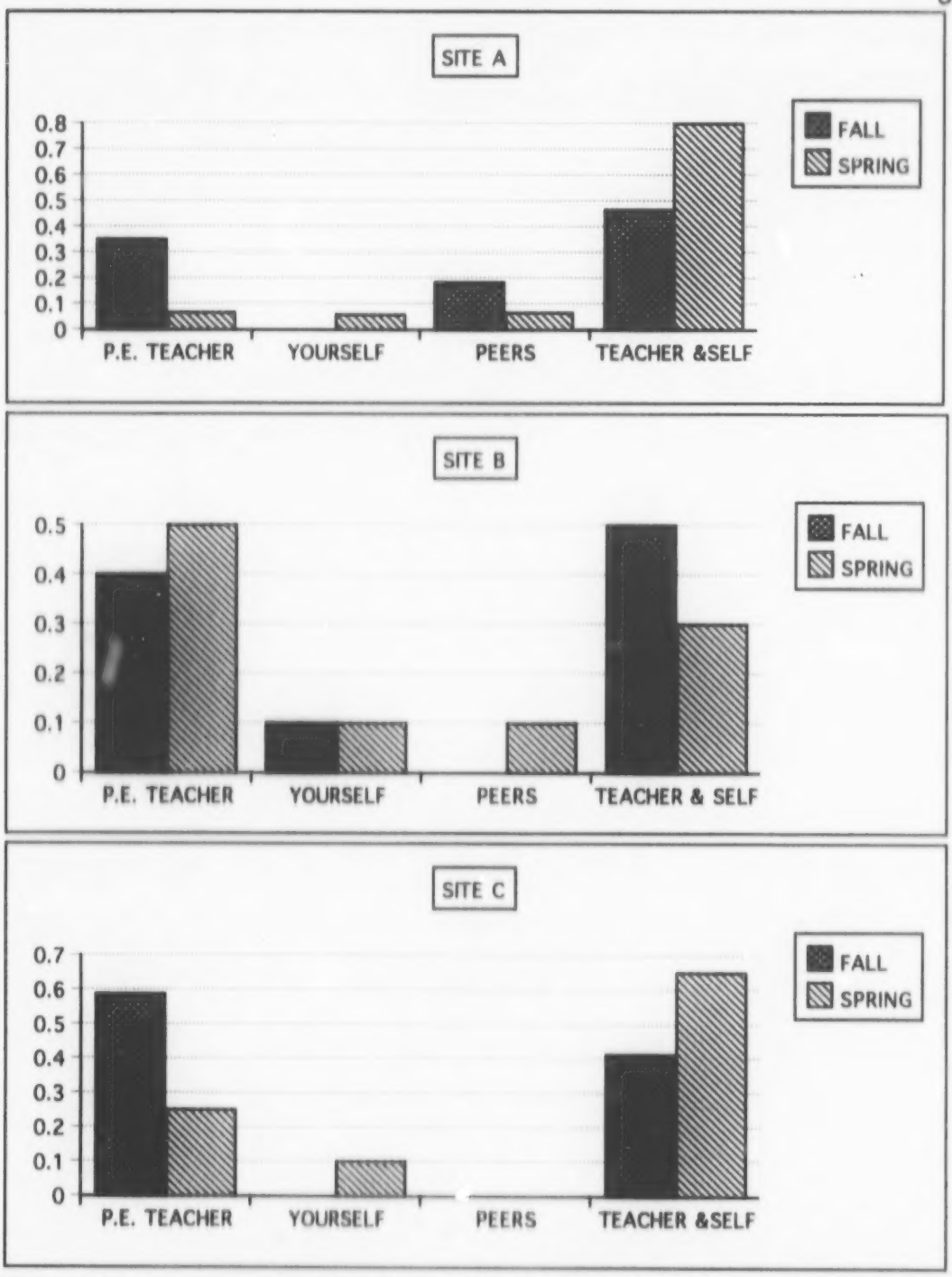

Figure 8 Student response regarding who should grade participation in physical education class.

The following graphs display the results of targeted student's response to the question on the post survey asking if they were ever required to self-assess in physical education class.

All sites showed a marked increase in student awareness of self-assessment. Targeted students recognized the use of self-assessment in their physical education classes during the intervention. Those answering yes increased by 40 percent at Site A, 50 percent at Site B and 35 percent at Site C.

Targeted students who felt that they were sometimes asked to self-assess in physical education class, decreased by four percent at Site A, Site B remained the same at 20 percent and an increase of three percent was shown at Site C.

Their was a marked decrease at all sites with targeted students answering 'no' when asked it they had ever been given the opportunity to self-assess in physical education class. Site A decreased by 35 percent, Site B decreased by 50 percent and Site C decreased by 40 percent.

The term self-evaluation was often used in the targeted seventh and fifth grade physical education classes. Consistent use of the term self-assessment could have better paralleled the survey's question as graphed in Figure 9. The students completed numerous self-assessments during the research project. Therefore researchers were surprised any students could respond negatively to the question, "Have you ever self-assessed in physical education class?"

The researchers feel there were two variables which may have effected the results. The first variable is the interchange of the use of the terms self-assessment and self-evaluation by the researchers during presentations to the students. The second variable was the use of the word sometimes in the survey. The word sometimes may have confused students' interpretation of the question. The anticipated response was yes. Students who responded sometimes could have felt that because they did not self-assess every day they could not respond yes.

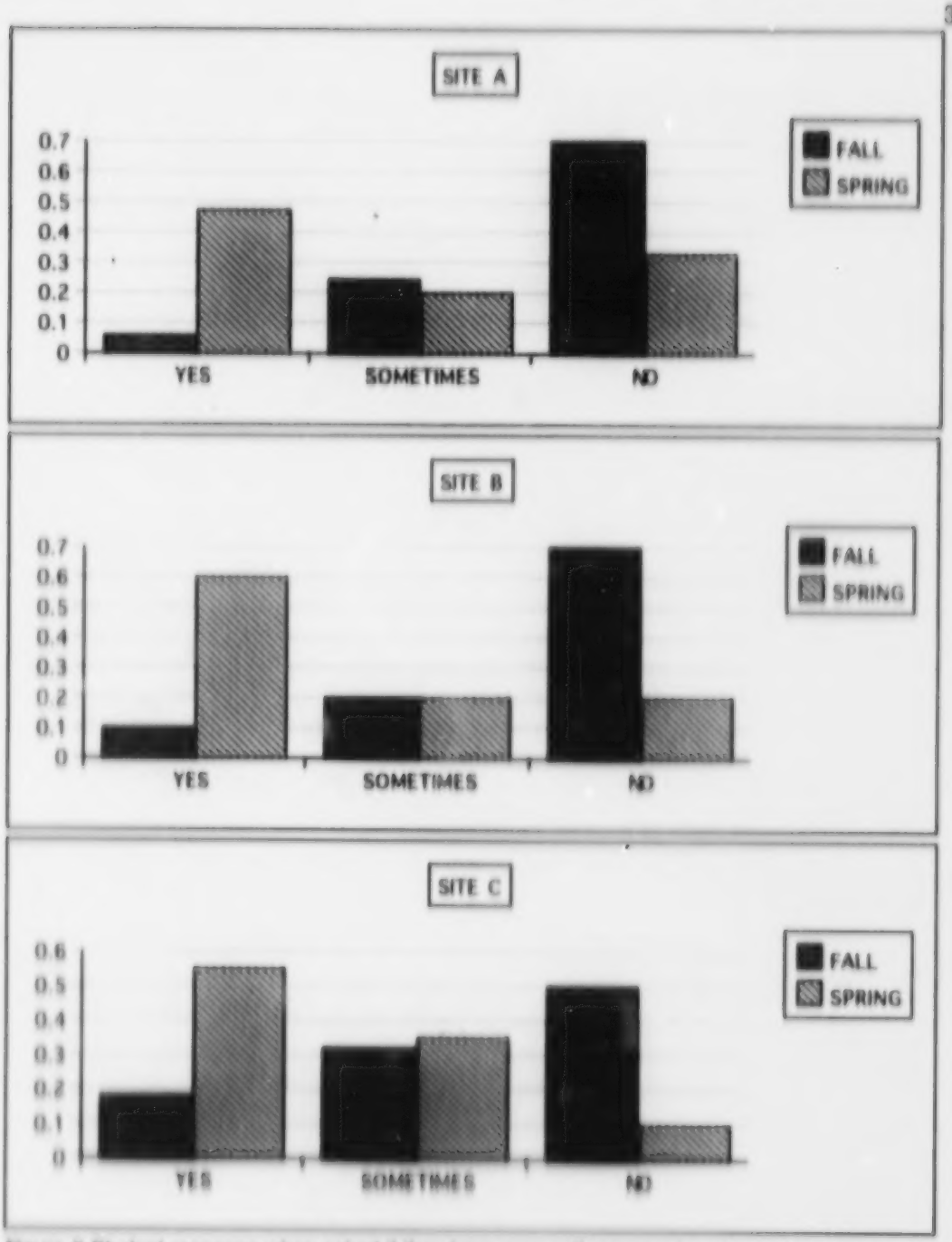

Figure 9 Student response when asked if they have ever self-assessed in physical education class.

Conclusions and Recommendations

Cooperative learning strategies are essential for this intervention to be effective. Following the introduction of the participation checklist/rubric, students awareness of teacher expectations increased. The initial use of participation checklist/rubrics provided an effective motivator for students who demonstrated concern over participation grade. An advantage of the participation checklist/rubric was the creation of a dialogue between physical education teacher and student. The student's participation improved as researchers' expectations were clearly communicated. As the intervention ensued the targeted students at Sites B & C became careless and nonchalant in their assessment. The need to reinforce sincere self-assessment arose half way through the intervention. Researchers agree that this tool has the potential to be effective with some minor revisions. Adapted participation checklist/rubric will be incorporated into lessons to provide structure for cooperative skills and preparedness for participation in physical education class. These participation checklist/rubric have been shared with faculty members in elective and/or core areas outside the physical education department.

Student journals were found to be extremely effective. At the beginning the reflections were very brief. As the intervention continued the students became more deliberate in their thoughts and communications in their journals. Thoughtful reflection increased as students took more of a role in respect to their learning. Journals had not been previously used in the targeted physical education

classes. The targeted students enjoyed having the opportunity to communicate in writing and were curious when journals were not available.

Sites B & C have extended the use of journals to their fourth grade classes. All sites plan to expand use of journals to additional grade levels and have shared samples with colleagues in the physical education departments.

Journaling expanded the source of teaching strategies in physical education. Physical education teachers' primary source of evaluation is observation. Feelings are not always observable and interpretations of observations can be misleading. The journal entries allowed the student to express their thoughts and feelings.

Setting goals appeared to make the students more focused. Their investment in the task at hand was more real as they had to evaluate what they thought would happen and work to achieve the personal goal that they had set for themselves. The students' ability to analyze what did and did not work intensified. Students claimed ownership of their predictions as they wrote them down which enhanced accountability. Students became aware of the need to check a previous goal before making a new prediction. Although goal setting through predicting skill was beneficial, more practice in this area needs to exist for refinement.

On going research is needed for continued improvements in techniques to be incorporated into physical education classes. Learning is intensified when a number of intelligences are utilized. Transfer of learning occurs when students see that reading, writing, and being creative along with the physical skill development combines to cultivate the total student.

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APPENDICES

Appendix A

TEACHER'S PHYSICAL EDUCATION SURVEY

Dear Colleague,

I am currently enrolled in Saint Xavier Field-Based Master's program. Please complete the survey form and return by September 1, 1996. The data is important to my research project. Please do not include your name, the survey is anonymous. Thank you for your time. Return the completed form to _____

1. Do you have any problems with students' participation in your classroom?

yes sometimes no

Can you give an example?_____

_____

2. Do you evaluate participation?

yes sometimes no

3. If you evaluate participation, what criteria do you use?

4. How often do you incorporate student self-assessment in your classroom?

never rarely often always

5. If you use self-assessment to what extent does the students' self-assessment determine the final grade?

0% 10% 30% 50%

Appendix B

PHYSICAL EDUCATION SURVEY

Students,

I am involved in a Master's research program and would appreciate your opinions about participation in Physical Education class. This is a voluntary activity and will not have any effect on your grade.

CIRCLE ONE ANSWER: BOY GIRL

1. Do you think participation should be a part of your Physical Education grade?

   yes sometimes no

2. Who do you think should grade your participation in Physical Education class?

   P. E. teacher yourself classmates P.E. teacher & yourself

3. Have you ever been asked to self assess in Physical Education?

   yes sometimes no

4. What percentage of your participation grade would you like to grade yourself?

   25% 50% 75% 100%

5. Effort in Physical Education is up to you. What percentage of effort do you usually give during gym class?

   25% 50% 75% 100%

6. Have you ever disagreed with an effort grade received in Physical Education?

   yes no

ANSWER BRIEFLY:

7. What information should be used to determine your participation grade? Please list three (3) things:

   1) _____

   2) _____

   3) _____

8. **Please write any questions or comments you have:**

Appendix C

PARTICIPATION CHECKLIST

NAME _____ **DATE** _____

Unit _____ **CLASS** _____

0 — **No** | 1 — **Missing Part** | 2 — **Yes**

1. **Prepared to participate**.....0 1 2
   - dressed for Physical Education (comfortable clothes & shoes)

CIRCLE ONE ANSWER:
RATING SCALE 0 **NEVER** | 1 **SOMETIMES** | 2 **OFTEN** | 3 **ALWAYS**

2. **Active listening**.....0 1 2 3
   - sitting up
   - eyes on speaker
   - no talking
   - keep hands to yourself (don't distract others)
   - be able to repeat information

3. **Cooperate with teacher**.....0 1 2 3
   - follow directions
   - be respectful

4. **Cooperate with group**.....0 1 2 3
   - stay on task
   - defer judgment (accept all ideas -no put downs)
   - contribute

5. **Sportsmanship/Teamwork**.....0 1 2 3
   - stay positive with self and group
   - acknowledge effort

6. **Enjoyment and Enthusiasm**.....0 1 2 3
   - smile
   - be encouraging

7. **Care and Proper use of equipment**.....0 1 2 3
   - wait for instruction before touching equipment
   - safety first
   - use equipment properly

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Appendix D

SOCCER JOURNAL

NAME_____ CLASS _____

My feelings as I start this unit are _____

_____

I discovered I was good at _____

_____

Today I _____

When I come to gym I will _____

_____

With the soccer unit over I discovered I can do _____

_____

My feeling now that soccer is over_____

_____

Appendix E

Tinikling Prediction Card

NAME _____ **CLASS** _____ **DATE**_____

Can you....	**YES**	**NO**	**GOAL**
1. **Keep the rhythm pattern with the poles for 32 counts (4 patterns)?**	_____	_____	____
2. **Keep the rhythm pattern with your feet for 32 counts (4 patterns)?**	_____	_____	____
3. **Enjoy the movement and try new rhythm patterns?**	_____	_____	____
4. **Help a group member learn the pattern?**	_____	_____	____
5. **Tell where this dance orginated from?**	_____	_____	____

Appendix F Site A

PHYSICAL EDUCATION SURVEY RESULTS

Pre-Survey student totals = 17 Post-Survey student totals = 15

CIRCLE ONE ANSWER:	BOY	GIRL
Pre	8	9
Post	7	8

1. Do you think participation should be a part of your Physical Education grade?

	yes	sometimes	no
Pre	12 (70%)	5 (30%)	0
Post	11 (73%)	4 (27%)	0

2. Who do you think should grade your participation in Physical Education class?

	P. E. teacher	yourself	classmates	P.E. teacher & yourself
Pre	6 (35%)	0	3 (18%)	8 (47%)
Post	1 (7%)	1 (7%)	1 (7%)	12 (80%)

3. Have you ever been asked to self assess in Physical Education?

	yes	sometimes	no
Pre	1 (6%)	4(24%)	12 (70%)
Post	7 (47%)	3 (20%)	5 (33%)

4. What percentage of your participation grade would you like to grade yourself?

	25%	50%	75%	100%
Pre	1 (6%)	10 (58%)	5 (30%)	1 (6%)
Post	0	6 (40%)	3 (20%)	6 (40%)

5. Effort in Physical Education is up to you. What percentage of effort do you usually give during gym class

	25%	50%	75%	100%
Pre	0	1 (6%)	7 (41%)	9 (53%)
Post	0	0	4 (27%)	11(73%)

6. Have you ever disagreed with an effort grade received in Physical Education?

	yes	no
Pre	5 (30%)	12 (70%)
Post	6 (40%)	9 (60%)

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Appendix F Site B

PHYSICAL EDUCATION SURVEY RESULTS

CIRCLE ONE ANSWER:	BOY	GIRL
Pre	11	9
Post	11	9

1. Do you think participation should be a part of your Physical Education grade?

	yes	sometimes	no
Pre	12 (60%)	6 (30%)	2 (10%)
Post	16 (80%)	2 (10%)	2 (10%)

2. Who do you think should grade your participation in Physical Education class

	P. E. teacher	yourself	classmates	P.E. teacher & yourself
Pre	8 (40%)	2 (10%)	0	10 (50%)
Post	10 (50%)	2 (10%)	2 (10%)	6 (30%)

3. Have you ever been asked to self assess in Physical Education?

	yes	sometimes	no
Pre	2 (10%)	4 (20%)	14 (70%)
Post	12 (60%)	4 (20%)	4 (20%)

4. What percentage of your participation grade would you like to grade yourself?

	25%	50%	75%	100%
Pre	0	4 (20%)	12 (60%)	4 (20%)
Post	1 (5%)	2 (10%)	8 (40%)	9 (45%)

5. Effort in Physical Education is up to you. What percentage of effort do you usually give during gym class?

	25%	50%	75%	100%
Pre	1 (5%)	2 (10%)	7 (35%)	10 (50%)
Post	0	0	8 (40%)	12 (60%)

6. Have you ever disagreed with an effort grade received in Physical Education?

	yes	no
Pre	8 (40%)	12 (60%)
Post	8 (40%)	12 (60%)

Appendix F Site C

PHYSICAL EDUCATION SURVEY RESULTS

Pre-Survey student totals = 22 Post-Survey student totals = 20

CIRCLE ONE ANSWER:	BOY	GIRL
Pre	11	11
Post	10	10

1. Do you think participation should be a part of your Physical Education grade?

	yes	sometimes	no
Pre	19 (86.4%)	3 (13.6%)	0
Post	16 (80%)	4 (20%)	0

2. Who do you think should grade your participation in Physical Education class?

	P. E. teacher	yourself	classmates	P.E. teacher & yourself
Pre	13 (59.1%)	0	0	9 (40.9%)
Post	5 (25%)	2 (10%)	0	13 (65%)

3. Have you ever been asked to self assess in Physical Education?

	yes	sometimes	no
Pre	4 (18.2%)	7 (31.8%)	11 (50%)
Post	11 (55%)	7 (35%)	2 (10%)

4. What percentage of your participation grade would you like to grade yourself?

	25%	50%	75%	100%
Pre	0	2 (9.1%)	10 (50%)	9 (40.9%)
Post	1 (5%)	2 (10%)	7 (35%)	10 (50%)

5. Effort in Physical Education is up to you. What percentage of effort do you usually give during gym class?

	25%	50%	75%	100%
Pre	0	0	10 (45.5%)	12 (54.5%)
Post	0	1 (5%)	7 (35%)	12 (50%)

6. Have you ever disagreed with an effort grade received in Physical Education?

	yes	no
Pre	2 (10%)	20 (90%)
Post	6 (30%)	14 (70%)